

AMENDMENTS TO THE SPECIFICATION:

Please amend the specification as follows:

Amend the Title to read:

EQUIPMENT FOR MEASURING THE OF LOCAL STREAMING POTENTIAL
MEASUREMENT OF A MEMBRANE FOR MONITORING THE FOULING PROCESS
OF MEMBRANE FOULING IN HOLLOW-FIBER MEMBRANE FILTRATIONS OF
NANO-COLLOIDAL SUSPENSION

Please amend paragraph [031] of the substitute specification filed on August 27, 2004, as follows:

[031] The pressure is generally proportional to the flow rate, and thus the
transmembrane ~~The Transmembrane~~ pressure can be properly adjusted up to 0.3% of
~~the maximum flow rate~~ by using a minute flow-control valve 11. The minute flow control
valve 11, installed at an outlet of a concentrate, may be able to precisely control the flow
rate to the extent of 0.3% of the maximum flow rate and pressure difference can be
~~measured by using a pressure gauge 14 transmembrane pressure can be properly~~
~~adjusted by using a minute flow control valve 11.~~

Please amend paragraphs [032] and [033] of the substitute specification filed on August 27, 2004, as follows:

[032] The streaming potential (~~ΔV~~ ΔV) generated between the upper and the lower regions of membrane pores at a given position of the hollow-fiber membrane is measured by using a multi-channel digital multi-meter 12 via Ag/AgCl electrodes 8 and

9 installed inside and outside of the given position, respectively, and recorded in a computer 13.

[033] The zeta potential can be obtained by plugging the values of streaming potential ΔV (ΔV), generated from a given pressure difference ΔP (ΔP), dielectric constant ϵ , conductivity of a solution λ , and viscosity of a solution η into the following Helmholtz-Smoluchowski equation ~~(1)~~(1).

$$\frac{\Delta V}{\Delta P} = \frac{\epsilon \zeta}{\lambda \eta} \quad \text{(1)}$$